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Remarks

In the Office Action of December 5, 2003, the Examiner rejected claims 1-5, 11, 17-21 and 27-30 were rejected as being unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,644,625 of E.L. Solot (hereafter referred to as Solot). Finally, claims 6-10, 12-16, 22-26, and 31 were rejected under 35 U.S.C. §103 as unpatentable over Solot in view of U.S. Patent No. 6,088,428 of D. Trandal, et. al (hereafter referred to as Trandal). Claims 1, 17, 21, 27, and 31 are being amended and claims 20 and 30 are being canceled.

Rejection of Claims 1-5 under 35 U.S.C. 102(b)

Amended claim 1 recites:

1 receiving audio information from the destination endpoint;
2 analyzing using automatic speech recognition the received
3 audio information for a first type of classification;
4 analyzing using automatic speech recognition the received
5 audio information for a second type of classification wherein the
6 second type of classification is for a presence of tones in the
7 audio information; and
8 determining a call classification for the destination endpoint
9 in response to the analysis of the first type of classification and the
10 analysis of the second type of classification.

The Examiner states that "Solot teaches ... analyzing using automatic speech recognition the received audio information for tones in response to the detection of tones (col. 5 lines 31-62)...." The cited text states:

The inventive apparatus recognizes the standard intercept tone by well known techniques which isolate the intercept tone from other audio signals and to determine the presence or absence of the intercept tone. The telephone company when a telephone number is changed, disconnected or other such happening that will not allow the call to be completed will intercept the incoming call and present a recorded voice message back to the caller stating why the call cannot be completed--this is the intercept message and is preceded by a tone or group of tones.

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When the tone or tones is received the present system will record the voice intercept message.

The present system analyzes the voice message via the voice recognition board (FIG. 1, Item 13). The software and the hardware that analyzes the voice is capable of providing a confidence level associated with the decoding of the voice message. A threshold 109 is provided such that when the confidence level meets or exceed the threshold the message contents are processed for a change in telephone number 111. The confidence level is built into the software supplied with the Voice Recognition board. This software determines what the utterance is and supplies a number from zero to 99 to indicate confidence in the utterance being properly determined. The system software will decide what level is suitable for acceptance depending on the errors encountered in a real world environment. If a new telephone number is provided the call may be placed to the new number 115 or a prompt to the caller informing 117 the caller of the new number. If the caller does not want to call the new number the system reverts back to the start 100. Otherwise, if the caller wishes, the new number is dialed and the state reverts to state 102.

The cited text clearly does not state that the tones are detected using automatic speech recognition; rather, the cited text states "The inventive apparatus recognizes the standard intercept tone by well known techniques which isolate the intercept tone from other audio signals and to determine the presence or absence of the intercept tone." There is no indication that these well known techniques include using automatic speech recognition which could not be known except from applicants' patent application.

Clearly, Solot does not anticipate amended claim 1 under 35 U.S.C. 102(b). Claims 2-5 are directly or indirectly dependent from amended claim 1 and are patentable for at least the same reasons as amended claim 1.

Rejection of Claim 11 under 35 U.S.C. 102(b)

Claim 11 is patentable under 35 U.S.C. 102(b) for the same reasons as amended claim 1.

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Rejection of Claims 17-21 under 35 U.S.C. 102(b)

Amended claims 17 and 21 and original claims 18 and 19 are patentable under 35 U.S.C. 102(b) for the same reasons as amended claim 1 and original claims 2-5.

Rejection of Claims 27-30 under 35 U.S.C. 102(b)

Amended claim 27 is patentable under 35 U.S.C. 102(b) for reasons similar to those set forth for amended claim 1. Original claims 28 and 29 and amended claim 31 are directly or indirectly dependent on amended claim 27 and are patentable for at least the same reasons.

Rejection of Claims 6-10 under 35 U.S.C. 103(a)

Claims 6-10 are directly or indirectly dependent on amended claim 1 and are patentable for at least the same reason as amended claim 1. Amended claim 1 is also patentable under 35 U.S.C. 103(a) over Solot in view of Trandal. The Examiner states that "Trandal discloses using a Hidden Markov Model to determine the presence of words and/or tone in audio information (col. 8 lines 16-25 and col. 23 lines 17-28)". Trandal does disclose using a Hidden Markov Model to determine the presence of words but not to determine the presence of tones. Cited text at col. 8, lines 16-25 states:

Over a frame duration, the DSP processes the signals represented by the received frames and transmit frames, for each channel of activity, as directed by DSP software in the program store. The DSP can perform several different types of processing including speech encoding and decoding, companding, tone detection and generation, speech recognition, text-to-speech conversion, etc. All require DSP processing or computation. Thus, the frame duration determines the maximum total number of computations possible per frame of transmit and receive data.

The cited text clearly does not state that the tone detection is being performed using any type of speech recognition but rather that tone detection is just one of a number of operations that the DSP can perform.

The cited text at col. 23, lines 17-28 states:

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If no DTMF digits are detected then state 548 is entered to process a voice utterance by the subscriber. As described in detail below, the DSP generates a hidden Markov model template for the utterance and compares the input template to the subscriber's stored template which was generated in the enrollment mode described above. In one preferred embodiment the DSP is also provided with means, in a subroutine of a stored program, to provide a subscriber with access to a mailbox extension. If extension service is enabled then control is passed on branch 552 to state 720 (not shown in detail) to process access to a mailbox extension.

Clearly, the cited text has no disclosure or suggestion of using any type of speech recognition technique to determine tones. Amended claim 1 is patentable under 35 U.S.C. 103(a) over Solot in view of Trandal.

Rejection of Claims 12-16 under 35 U.S.C. 103(a)

Claims 12-16 are patentable under 35 U.S.C. 103(a) over Solot in view of Trandal for similar reasons as those set forth for claim 6-10.

Rejection of Claims 22-26 under 35 U.S.C. 103(a)

Claims 22-26 are patentable under 35 U.S.C. 103(a) over Solot in view of Trandal for similar reasons as those set forth for claim 6-10.

Rejection of Claim 31 under 35 U.S.C. 103(a)

Amended claim 27 is patentable under 35 U.S.C. 103(a) over Solot in view of Trandal for similar reasons as those set forth for amended claim 1. Amended claim 31 is directly dependent on amended claim 27 and is patentable for least the same reasons.

Summary

In view of the foregoing, applicants respectfully request consideration of claims 1, 17, 21, 27, and 31, as amended, reconsideration of claims 2-16, 18, 19, 22-26, 28, and 29, as presently in the application, and allowance of these claims.

Although the foregoing is believed to be dispositive of the issues in the application, if the Examiner believes that a telephone

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interview would advance the prosecution, the Examiner is invited to call applicants' attorney at the telephone number listed below.

Respectfully,

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